Proceedings (Mathematical Sciences)

Volume 95, 1986

SUBJECT INDEX

Ablation
Axisymmetric melting of a long cylinder due to an infinite flux 1
Algebraic family
Cohomology of the moduli of parabolic vector bundles 61
Alternating magnetic field
Instability of a planar liquid layer in an alternating longitudinal magnetic field with non-zero mean 13
Analytic map
Analytic and harmonic maps into a topological space 37
Aspect ratio
Effect of aspect ratio on the meridional circulation of a rotating homogeneous fluid 31
Asymptotic behaviour
Asymptotic properties of solutions of difference equations 141
Axisymmetric micropolar elastic medium
On torsional loading in an axisymmetric micropolar elastic medium 109

Bazilevic functions
On a subclass of Bazilevic functions 121
Betti numbers
Cohomology of the moduli of parabolic vector bundles 61
Bilateral generating functions
On a class of bilateral generating functions for certain special functions 133

C^*-algebra
On subnormal operators 41
C^*-spectral inclusion property
On subnormal operators 41
Coarse-graining
Sufficiency and strong commutants in quantum probability theory 97
Cohomology
Cohomology of the moduli of parabolic vector bundles 61
Commutants
Sufficiency and strong commutants in quantum probability theory 97
Conditional expectation
Sufficiency and strong commutants in quantum probability theory 97
Convective marginal state
Convective instability of a rotating layer of ferromagnetic fluid 23
Couple stress
On torsional loading in an axisymmetric micropolar elastic medium 109

Difference equation
Asymptotic properties of solutions of difference equations 141
Displacement
On torsional loading in an axisymmetric micropolar elastic medium 109

Embedding technique
Axisymmetric melting of a long cylinder due to an infinite flux 1
Exact covering number
Computation of $g(1, 5; 10)$ 45

Ferromagnetic fluid
Convective instability of a rotating layer of ferromagnetic fluid 23
Force stress
On torsional loading in an axisymmetric micropolar elastic medium 109
Function algebra
Analytic and harmonic maps into a topological space 37

Generating function
Some generating functions of Jacobi polynomials 53
Geomagnetic field
Instability of a planar liquid layer in an alternating longitudinal magnetic field with non-zero mean 13

Harmonic map
Analytic and harmonic maps into a topological space 37
Heat-balance condition
Axisymmetric melting of a long cylinder due to an infinite flux 1
Homogeneous fluid
Effect of aspect ratio on the meridional circulation of a rotating homogeneous fluid 31

Integral solutions
Computing the number of ways of representing primes by a norm form 127
Interface
Instability of a planar liquid layer in an alternating longitudinal magnetic field with non-zero mean 13

Isotherm condition
Axisymmetric melting of a long cylinder due to an infinite flux 1
Ito's formula
Stochastic evolution equations in locally convex space 79

Jacobi polynomials
Some generating functions of Jacobi polynomials 53

Locally convex space
Stochastic evolution equations in locally convex space 79

Meridional circulation
Effect of aspect ratio on the meridional circulation of a rotating homogeneous fluid 31
Microrotation
On torsional loading in an axisymmetric micropolar elastic medium 109
Moduli space
Cohomology of the moduli of parabolic vector bundles 61
Moving boundary problems
Axisymmetric melting of a long cylinder due to an infinite flux 1

Natural congruence
Computing the number of ways of representing primes by a norm form 127

Overstability
Convective instability of a rotating layer of ferromagnetic fluid 23

Parabolic vector bundles
Cohomology of the moduli of parabolic vector bundles 61

Quantum probability
Sufficiency and strong commutants in quantum probability theory 97
Quasinormal operators
On subnormal operators 41

Schrödinger representation
Sufficiency and strong commutants in quantum probability theory 97
Self-dual subnormal operators
On subnormal operators 41
Sobolev spaces
Cohomology of the moduli of parabolic vector bundles 61
Special functions
On a class of bilateral generating functions for certain special functions 133
Stability
Instability of a planar liquid layer in an alternating longitudinal magnetic field with non-zero mean 13
Convective instability of a rotating layer of ferromagnetic fluid 23
Steiner system
Computation of $g(1, 5; 10)$ 45
Stochastic evolution equation
Stochastic evolution equations in locally convex space 79
Stochastic integral
Stochastic evolution equations in locally convex space 79
Subclass
On a subclass of Bazilevic functions 121
Subnormal operators
On subnormal operators 41
Sufficiency
Sufficiency and strong commutants in quantum probability theory 97

Torsional loading
On torsional loading in an axisymmetric micropolar elastic medium 109

Unbounded representations
Sufficiency and strong commutants in quantum probability theory 97
Unilateral shifts
On subnormal operators 41

Wiener process
Stochastic evolution equations in locally convex space 79

AUTHOR INDEX

Abbas M
see Bhattacharyya S P 13
see Bhattacharyya S P 23
Anjana Wiramani-Prasad
see Vasanti N Bhat-Nayak 45
Arundhathi S
Analytic and harmonic maps into a topological space 37

Balasubramanian R
see Somaraju V 31
Bhattacharyya S P
Instability of a planar liquid layer in an alternating longitudinal magnetic field with non-zero mean 13
Convective instability of a rotating layer of ferro-magnetic fluid 23
Bhatt J Subhash
Sufficiency and strong commutants in quantum probability theory 97

Chadha T K
see Kumar Rajneesh 109
Chongdar A K
On a class of bilateral generating functions for certain special functions 133

Gupta B C
On subnormal operators 41
Gupta S C
Axisymmetric melting of a long cylinder due to an infinite flux 1

Kulkarni S H
see Arundhathi S 37

Kumar Rajneesh
On torsional loading in an axisymmetric micropolar elastic medium 109

Mohandas D A
see Somaraju V 31

Nitsure Nitin
Cohomology of the moduli of parabolic vector bundles 61

Popenda J
Asymptotic properties of solutions of difference equations 141

Shanmugam T N
On a subclass of Bazilevic functions 121
Somaraju V
Effect of aspect ratio on the meridional circulation of a rotating homogeneous fluid 31

Tandon Rajat
Computing the number of ways of representing primes by a norm form 127
Thakurta Bidyut Guha
Some generating functions of Jacobi polynomials 53

Vasanti N Bhat-Nayak
Computation of $g(1, 5; 10)$ 45

Yadava S L
Stochastic evolution equations in locally convex space 79

Proceedings of the Indian Academy of Sciences

(Mathematical Sciences)

Volume 95, 1986

CONTENTS

Axisymmetric melting of a long cylinder due to an infinite flux ..... *S C Gupta* 1

Instability of a planar liquid layer in an alternating longitudinal magnetic field with non-zero mean ..... *S P Bhattacharyya and M Abbas* 13

Convective instability of a rotating layer of ferromagnetic fluid ..... *S P Bhattacharyya and M Abbas* 23

Effect of aspect ratio on the meridional circulation of a rotating homogeneous fluid ..... *V Somaraju, D A Mohandas and R Balasubramanian* 31

Analytic and harmonic maps into a topological space ..... *S Arundhathi and S H Kulkarni* 37

On subnormal operators ..... *B C Gupta* 41

Computation of $g(1, 5; 10)$ ..... *Vasanti N Bhat-Nayak and Anjana Wiramani Prasad* 45

Some generating function of Jacobi polynomials ..... *Bidyut Guha Thakurta* 53

Cohomology of the moduli of parabolic vector bundles ..... *Nitin Nitsure* 61

Stochastic evolution equations in locally convex space ..... *S L Yadava* 79

Sufficiency and strong commutants in quantum probability theory ..... *Subhash J Bhatt* 97

On torsional loading in an axisymmetric micropolar elastic medium ..... *Rajneesh Kumar and T K Chadha* 109

On a subclass of Bazilevic functions ..... *T N Shanmugam* 121

Computing the number of ways ot representing primes by a norm form ..... *Rajat Tandon* 127

On a class of bilateral generating functions for certain special functions ..... *A K Chongdar* 133

Asymptotic properties of solutions of difference equations ..... *J Popenda* 141

Subject Index 155

Author Index 157